UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.      | FILING DATE                      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|----------------------------------|----------------------|---------------------|------------------|
| 10/534,040           | 05/06/2005                       | Tetsuya Yano         | 03500.018108.       | 2351             |
|                      | 7590 06/23/200<br>CELLA HARPER & | EXAMINER             |                     |                  |
| 30 ROCKEFELLER PLAZA |                                  |                      | LILLING, HERBERT J  |                  |
| NEW YORK, NY 10112   |                                  |                      | ART UNIT            | PAPER NUMBER     |
|                      |                                  |                      | 1657                |                  |
|                      |                                  |                      |                     |                  |
|                      |                                  |                      | MAIL DATE           | DELIVERY MODE    |
|                      |                                  |                      | 06/23/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|   | Application No.   | Applicant(s)  |  |  |  |
|---|---|---|--|--|--|
|   | 10/534,040  | YANO ET AL.   |  |  |  |
| Office Action Summary   | Examiner  | Art Unit  |  |  |  |
|   | HERBERT J. LILLING  | 1657  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sheet with the c  | orrespondence address   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). |  |  |  |
| Status  |   |   |  |  |  |
| Responsive to communication(s) filed on <u>5-12-</u> This action is <b>FINAL</b> . 2b)⊠ This     Since this application is in condition for allowar closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro  | secution as to the merits is  |  |  |  |
| Disposition of Claims   |   |   |  |  |  |
| 4) Claim(s) 1-23 is/are pending in the application.  4a) Of the above claim(s) 2-7 and 13-23 is/are solutions.  5) Claim(s) is/are allowed.  6) Claim(s) 1 and 8-12 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) 2-7 and 13-23 are subject to restriction.  Application Papers  9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction.   | withdrawn from consideration.  n and/or election requirement.  r. epted or b)  objected to by the Edrawing(s) be held in abeyance. See                              | e 37 CFR 1.85(a).   |  |  |  |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |   |  |  |  |
| Priority under 35 U.S.C. § 119  |   |   |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 05-6-05;05-22-06;1-16-09.  | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:   | ite   |  |  |  |

Art Unit: 1657

Receipt is acknowledged of an election response filed May 12,
 2009 for this Application which is a 371 of PCT/JP04/06349 filed April 30, 2004.

- 2. Claims 1-23 are present in this application.
- 3. Applicant has elected with traverse Invention I, claims 1-13 as noted:

Group I, claim(s) 1-13, **drawn to a <u>structure</u>** comprising a base material characterized in that the base material is coated at least partly with a polyhydroxyalkanoate containing at least one monomer unit selected from the group consisting of those represented by one of the chemical formulae [1] to [8], classified in Classes 435, 528, 428 or 430 depending upon the base material whether it is a particulate or a plate, subclasses 435/135; 528/271 428/800+ or 430/109.2 or 109.4 or 110.1 further depending upon the processes; which claimed subject matter for Invention I that is commensurate in scope with the election of species which includes claims 1 and 8-12.

Thus, Claims 2-7 and 13-23 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected Inventions and species elections, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 12, 2009. However, Applicant has not indicated any errors on the part of this Examiner that the restriction as well as the election of species was in error.

The Restriction and Election of species have been made **Final**.

 In accordance with this Tech Center Policy based on above restriction containing product claims and process claims, this Examiner Art Unit: 1657

will rejoin any non-elected process claims upon the election of a product claim which is subsequently is found allowable in view of the following guidelines:

## F.P.: Ochiai/Brouwer Rejoinder form paragraph

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations**of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Art Unit: 1657

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 8, 9 and 12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over:

a) claims 1, 2, 12, 14 and 15 of U.S. Patent No. 7,153,622;

or

b) claims 1,2 and 3 of U.S. Patent No. 6,853,477.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are within the claimed scope the instant claims.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1657

## A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by:

- i) Ref N Nomoto et al EP 1253475 A2 Publication date October 2002
- ii) Ref O Nomoto et al EP 1254930 A2 Publication date November 2002; or
- iii) Ref P Nomoto et al EP 1275728 A1 Publication date January 2003.

Each of the references teaches a structure within the scope of the claimed inventions which essentially recites:

1. A structure comprising a base material characterized in that the base material is coated at least partly with a polyhydroxyalkanoate containing at least one monomer unit selected from the group consisting of those represented by one of the chemical formulae [1] to [8]:

(wherein, the monomer unit is at least one selected from the group consisting of monomer units in which a combination of R1 and "a" is any one of combinations, wherein R1 is vinyl group; and "a" is an integer of 1 to 10),

Claim 8. The structure according to claim 1, wherein

Art Unit: 1657

the base material is particulate.

9. The structure according to claim 8, wherein the base material contains a colorant.

- 10. A toner which contains the structure according to claim 8.
- 11. The structure according to claim 1, wherein the base material is in the form of flat plate or film.
- 12. The structure according to claim 1, wherein the monomer unit composition in the polyhydroxyalkanoate varies from the structure inside towards the outside of the structure.

### REFERENCES DISCLOSES:

## i) Ref N Nomoto et al EP 1253475 A2

As indicated in claims 1-3 a toner that comprises a colorant at least a part is covered with a PHA which PHA is the same as in formula (1) which reference is considered to anticipate claims 1, 8-10 and 12 as noted by Abstract of the cover sheet; paragraphs: [0081] of page 24; claims 1-3 of page 61 and claim 17 of page 17.

## ii) Ref O Nomoto et al EP 1254930 A2

Art Unit: 1657

The reference teaches in claims 1 and 2 a PHA structure within the scope of the claimed language as indicated by Cover sheet whereby a base material is coated at least a part with a PHA; paragraphs [0002] of page 3 teaches a plate or file base material whereby PHA coats a granular base material which [0019] base material is a particulate that includes colorants which paragraph [0032] of page 8 teaches a monomer within the scope of the claims that coats the particulates and [0041 of page 15 teaches claim 12 structure and claims 1-2 teaches claim a structure within the scope of the claims.

### iii. Ref P Nomoto et al EP 1275728 A

Nomoto et al teaches as indicated on the cover sheet Abstract that pigment particles are coated with at least a part of the surface with PHA which disclosure paragraphs [0029] on page 15 teaches claim 12 structure; [0050] on page 18 that the pigment includes colorants; [0074] the pigment and PHA layer which teaches claims 11-12 and claims 1-2 on page 44.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

i) Ref N Nomoto et al EP 1253475 A2 Publication date Oct 2002;

Art Unit: 1657

ii) Ref O Nomoto et al EP 1254930 A2 Publication date Nov 2002;

or

iii) Ref P Nomoto et al EP 1275728 A1 Publication date Jan 2003.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The references each alone or further in view of each other teaches the claimed subject matter for claims 1 and 8-12 for the claimed structures as noted by the above disclosures in paragraph 6. If there are any differences with respect to the claimed structures absence a showing that these differences which includes the specific base material, specific colorant or type of base material.

In light of the Supreme Court's decision in KSR International Co. v. Teleflex Inc (TFX) ., 82 USPQ2d 1385 (2007) based on the reasoning may still include the established Court of Appeals for the Federal Circuit standard that a claimed invention may be obvious if the examiner identifies a prior art teaching, suggestion, or motivation (TSM) to make it. However, the Guidelines explain that there is no requirement that patent examiners use the TSM approach in order to make a proper obviousness rejection. **Furthermore, the Guidelines point** 

Application/Control Number: 10/534,040

Art Unit: 1657

# out that even if the TSM approach cannot be applied to a claimed invention that invention may still be found obvious.

If there are any differences with respect to the claimed subject matter and the general knowledge pertaining to the art in the area, that these differences would have been prima facie obvious to one of ordinary skilled in the pertinent art whether it was based on the art of record or claimed subject would have obvious for the "combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results".

Further in view of "In U.S. v Adams...." Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the filed, the combination must do more than yield a predictable result."; which is the same issue as in this application that the structure is not novel over the art of record.

Furthermore in view of ".Sakraida v. AG Pro Inc., ...the conclusion that when a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious."

The Supreme stated the following:

"When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, 35 .S.C. 103 bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve a similar devices I the same way, using the technique is obvious unless its actual application is beyond his or her skill."

The KSR Decision requires rationales to support the rejections under 35 USC 103. The first issue is to analyze the Graham factual inquires as noted above for obviousness based of the prior art but the prior art is not limited to references but includes the basic knowledge and understanding of one skill in the pertinent art. Thus, the prior art alone or in combination does not have to teach or suggest or motivate one all of the limitations of the claimed limitations but there must be some rationale to explain these differences would have been obvious to one of ordinary skill in the art.

Art Unit: 1657

### 8. No claim is allowed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HERBERT J. LILLING whose telephone number is 571-272-0918. The examiner can normally be reached on WORK AT HOME MAXIFLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JON WEBER can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.J.Lilling: HJL (571) 272-0918 Art Unit <u>1657</u> <u>June 21, 2009</u>

/HERBERT J LILLING/ Primary Examiner Art Unit 1657